

## Claims

- [c1] *Sub A1* 1. A brush seal assembly for sealing a gap between a first component and a second component comprising:
- a body;
  - bristles extending from said body; and
  - an extension from said body, said extension having an elongated slot therein;
- wherein said slot, when said brush seal assembly mounts between said first and second component, allows said brush seal assembly to float within said gap.
- [c2] 2. The brush seal of claim 1, wherein said brush seal assembly can axially float within said gap.
- [c3] 3. The brush seal of claim 1, wherein said brush seal is an axial brush seal.
- [c4] 4. The brush seal of claim 1, further comprising a spring for biasing said brush seal.
- [c5] 5. The brush seal of claim 4, wherein said spring biases said brush seal against said second component.
- [c6] 6. The brush seal of claim 4, wherein said spring biases said brush seal away from said second component.
- [c7] 7. An axial brush seal assembly for sealing a gap between a first component and a second component, comprising:
- a body;
  - bristles extending from said body; and
  - means for allowing movement of said brush seal assembly in an axial direction within said gap.
- [c8] 8. The axial brush seal assembly of claim 7, wherein said allowing means comprises an extension from said body, said extension having a slot therein elongated in said axial direction.

- A [c9] 9. The axial brush seal assembly of claim 7, wherein said allowing means comprises an elongated slot.
- [c10] 10. The axial brush seal assembly of claim 9, in combination with said second component, said second component including said elongated slot and said brush seal assembly including a member extending into said slot.
- [c11] 11. The axial brush seal assembly of claim 9, in combination with said second component, said second component including said elongated slot and said brush seal assembly resides in said elongated slot.
- [c12] 12. An apparatus, comprising:  
a first component;  
a second component spaced from said first component in an axial direction; and  
an axial brush seal assembly movably mounted between said first and second component;  
wherein said brush seal assembly can move in said axial direction.
- [c13] 13. The apparatus of claim 12, wherein said brush seal assembly includes bristles engaging said first and second components.
- [c14] 14. The apparatus of claim 12, further comprising a spring to bias said brush seal.
- [c15] 15. The apparatus of claim 12, wherein said apparatus is a gas turbine engine.
- [c16] 16. A method of sealing a gap between a first component and a second component, comprising the steps of:  
placing an axial brush seal assembly between said first and second components; and  
allowing said brush seal assembly to float in said gap.
- [c17] 17. The method of claim 16, wherein said allowing step comprises allowing said brush seal to float axially in said gap.
- [c18] 18. The method of claim 15, wherein said allowing step includes a step of

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applying a bias force to said brush seal.

[c19]

19. The method of claim 18, wherein said applying step comprises applying a spring bias force to said brush seal.

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